

(43) **Pub. Date:**

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2007/0299431 A1 Jakubowski et al.

(54) SYSTEMS AND METHODS FOR TREATING SUPERFICIAL VENOUS MALFORMATIONS LIKE SPIDER VEINS

(75) Inventors: Anthony Jakubowski, Montgomery, IL (US); Aidan Mulloy, Co Dublin (IE); Edward G. Mackay II, Largo, FL (US); Killian O'Dowd, Co Dublin (IE); Alan A. Creamer, Carlsbad, CA (US);

Sherif Sultan, Galway (IE)

Correspondence Address: RYAN KROMHOLZ & MANION, S.C. **POST OFFICE BOX 26618** MILWAUKEE, WI 53226 (US)

(73) Assignee: Green Medical, Inc.

(21) Appl. No.: 11/799,583

(22) Filed: May 2, 2007

Related U.S. Application Data

Dec. 27, 2007

- (63) Continuation-in-part of application No. 11/446,800, filed on Jun. 5, 2006.
- (60)Provisional application No. 60/796,656, filed on May 2, 2006.

Publication Classification

(51) Int. Cl. A61B 18/18 (2006.01)

(52)

(57)**ABSTRACT**

Systems and methods treat superficial venous malformations, such as spider veins. The systems and methods distribute a reactive agent, e.g., a light-reactive agent such as talaporfin sodium or verteporfin, at or near an inner wall of a vein. The systems and methods activate the reactive agent by applying energy, e.g. non-thermal light energy at a wavelength that activates the reactive agent to cause localized injury to the inner wall of the vein.

